

ABSTRACT OF THE DISCLOSURE

A solution having a polymer dissolved in a hydrophobic organic solvent is cast on a substrate, said organic solvent is evaporated in a moist atmosphere to condense moisture contained in an atmosphere prevailing on a surface of said cast solution into micro-droplets, said micro-droplets are dispersed on the surface of said cast solution or in said cast solution into a close-packed structure, said micro-droplets, condensed and dispersed on the surface of said cast solution or in said cast solution, are evaporated to obtain a porous honeycomb structure with said droplets used as casts, and said porous honeycomb structure is at least bisected by peeling in a thickness direction, thereby obtaining honeycomb structures wherein micro-pillars or anisotropic micro-pillars are regularly formed and arranged by said bisection on the peeled sections.

The resulting structure, because of having a unique microstructure on its surface, possesses unique surface properties as compared with a film-like structure free of any microstructure or a structure with irregular pillars. Such unique properties could produce striking advantages inclusive of prominent touch. The inventive micro-pillar structure is expected to have applications in limitless technical fields, making a great deal of contribution to developments in the industry.